



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/803,496	03/08/2001	Bert L. Fransis	P2300	6057

24739 7590 07/20/2004

CENTRAL COAST PATENT AGENCY
PO BOX 187
AROMAS, CA 95004

EXAMINER

TRAN, PABLO N

ART UNIT	PAPER NUMBER
----------	--------------

2685

DATE MAILED: 07/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/803,496

Applicant(s)

FRANSIS, BERT L.

Examiner

Pablo N Tran

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 5-9, 12-16, and 19-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Balwin et al. (6,560,448).

As per claims 1, 5-8, 12-15, and 19-21, Baldwin et al. disclose a broadband receiving/transmitting system having an antenna for receiving or transmitting RF signals in a broadband spectrum including a first number of signal bands, a conversion integrated circuit (IC) coupled to the first number of signal bands by a first interface of the IC, a modulation circuitry coupled to the IC by a second interface of the IC for receiving or transmitting each of the bands at a common intermediate frequency (IF), wherein the conversion IC comprises a plurality of circuit elements coupled to the first interface, one for each of the frequency bands, for up-conversion or down-conversion of the frequency bands to and from an intermediate frequency (IF), and a second number of on-chip voltage-controlled oscillators (VCOs) coupled to the circuit elements

Art Unit: 2685

for generating local-oscillator (LO) signals to the circuit elements for conversion between the IF frequency and the receive or transmit frequency for each band, the second number less than the first number (fig. 2, col. 6/ln. 21-col. 7/ln. 11).

As per claims 2, 9 and 16, Baldwin et al. disclose wherein the on-chip VCO is coupled to two or more of the RF frequency bands (fig. 2, col. 6/ln. 21-col. 7/ln. 11).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-4, 10-11, and 17-18 rejected under 35 U.S.C. 103(a) as being unpatentable over Balwin et al. (6,560,448).

As per claims 3-4, 10-11, and 17-18, Balwin et al. do not disclose a doubling and/or a redoubling circuit couple to the VCO. However, such doubling circuitry is notoriously well known in the art that the examiner takes Official Notice of such.

Therefore, it would have been obvious to one of ordinary skill in the art to provide such doubling circuitry couple to the VCO to the ZIP IC of Balwin in order to provide such RF frequency matching dependent upon the requirements of the radio telecommunication system.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sugar et al. (6,728,517), Akamine et al. (6,658,243), Fransis (6,564,045), Underbrink (6,650,879), See (6,693,826), Gomez (6,583,675), Oh et al. (6,539,216), Hatcher et al. (6,535,725), Hikita et al. (56,714,099), Anumula et al. (6,630,860), Takikawa et al. (6,624,509), Rozenblit (6,658,237), Damgaard et al. (6,516,184), Lee et al. (6,335,952), Martin (6,498,819), Bezzam et al. (6,115,586), Lau et al. (6,122,506), Haartsen (6,081,697), Meador et al. (5,953,640), Devlin et al. (5,930,686), Kumar (5,835,850), Brueske et al. (5,894,592), Ripley et al. (5,870,670), Kennan (5,649,312), Scheinberg (5,625,307), Rodal (5,564,098), Kitazono et al. (5,525,937), and Nishmura et al. (EP1005155A1) Transmitter/receiver for a disclose radiotelephone communication system.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pablo Tran whose telephone number is (703)308-7941. The examiner normal hours are 9:30 -5:00 (Monday-Friday). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (703)305-4385.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Art Unit: 2685

or faxed to:


(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

PABLO N. TRAN
PRIMARY EXAMINER

July 10, 2004


AU2685